

II. SPECIFICATION AMENDMENTS

Please replace the paragraph beginning on page 3, line 20 through page 4, line 3 as rewritten below:

In many applications based on these input space mapping based algorithms, for instance in signal and image processing, the main step consists in analyzing an essential characteristic of the input patterns. Although a determined input pattern and the prototypes stored in the ANN can be similar (or even identical) as far as this essential characteristic is concerned, the distance therebetween may be high due to the other ~~parameters~~³ parameters taken into consideration in the distance evaluation process. As a consequence, it is often necessary to use as many neurons as there are different variations in the input patterns to store them as different prototypes. The two examples described below will illustrate this major inconvenience.